AMSAT Weekly Satellite Report
Issue: WSR-268
Date: 2005-09-25
Sources: amsat-ans-2005-wsr-268.txt

This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <W8ISS $ANS-268.S1
WSR 268 Part 1 09/25/2005

AMSAT NEWS SERVICE BULLETIN 268.S1 FROM AMSAT HQ
SILVER SPRING, MD, SEPTEMBER 25, 2005
TO ALL RADIO AMATEURS
BID: $ANS-268.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: On orbit
Current Mode: U/V

Proposed frequencies:

Indian transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacom : 145.940MHz continue carier signal

Dutch transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message
[07242005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
      FM REPEATER - V/U

Analog voice downlink: 435.300 MHz FM
          435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
          145.920 MHz FM 67Hz PL tone
                      1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
   Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Current scheduled operating modes:

26 Sept
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

AO-51 Special Event - JOTA Weekend 15-16 Oct

The annual Boy and Girl Scouts "Jamboree on the Air" Amateur Radio event is scheduled for 15 and 16 October 2005. As this is an International Scouting event, amateur radio stations around the world are invited to participate. The AO-51 command team is scheduling the satellite for exclusive use by the Scouts, and Satellite operators communicating with the Scouts, for this week-
end. Please allow the Scouts the opportunity to make as many contacts as possible via AO-51 during this short time period. Base stations, please remember that most of the JOTA stations will be portable, so please use minimum power. The official times for the JOTA event will be from 1200 UTC on October
15 until 1200 UTC on October 17, 2005.

For the JOTA weekend, AO-51 will be configured in the Dual FM repeater mode. This will provide two independent FM repeaters (separate uplink and downlink frequencies) for use over the weekend. Both repeaters will be for use by the JOTA activity. This mode will run Monday through Friday before the event to allow amateur satellite stations to familiarize and test this mode. The configuration of the satellite frequencies for this mode is listed below.

AO-51 FM repeater #1
Downlink: 435.300 MHz
Uplink: 145.920 MHz with 67hz PL Tone

AO-51 FM repeater #2
Downlink: 435.150 MHz
Uplink: 145.880 MHz with NO PL Tone

Here are some web links for information on the JOTA weekend activity.
http://www.arrl.org/FandES/ead/jota.html
http://www.arrl.org/FandES/ead/ideas.html
http://www.scouting.org/international/jota.html

If your local club has a JOTA activity planned for the weekend please consider
volunteering your services to provide a satellite communication station for the event.

Thanks for your support and participation.

[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[09252005]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that SO-50 has

shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The
order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm
   the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT
   the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window
   will reset the 10 minute timer.

[09122004]

=====

FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

John, N4QWL reports on July 16th, 2005:

Last evening I had a AOS to LOS qso with WI2W. FO-29 came up at 01:17z here in FM07 and I found WI2W and we chatted until 01:33z. The satellite was at 2 degrees elevation when I finally heard him start to crackle a bit. What a great QSO! To think that I watched this bird launch back in 1996 and it is still working so well is a real thrill. I believe I still have the video. I might just look for it and watch it again. Boy do I love this satellite stuff! Look for you all up there.

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that will automatically analyze all digital telemetry from the satellite (such as current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[ANS-WSR wishes to thanks John, N4QWL for this week's report]
[07172005]

=====

AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick, N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web
site, with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS-WSR thanks John, K6YK, for this week's AO-27 report]
[08292004]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
            432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A
            145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record
contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry.
The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11142004]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: U/V CROSS-BAND REPEATER
Digipeater: Inactive

The current Expedition 11 crew is:
Commander Sergei Krikalev
Flight Engineer John Phillips

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

This from Frank Bauer, KA3HDO:
The SSTV system will be installed inside the Service module as an integral
part of the ARISS ham radio system. It will transmit and receive (JPG)
still images from the International Space Station in a format called Slow

Scan TV (SSTV). When fully operational, the SSTV system is capable of sending up to 480 images per day from ISS. It will also be able to receive images from amateur radio stations on Earth. This system will utilize the already installed Kenwood D-700 radio and the ARISS antennas mounted on the Service Module. The SSTV equipment flown on Progress 19P includes the SpaceCam software, a radio/computer interface module, and data cables. The dedicated laptop for SSTV operations will be launched on a subsequent Progress vehicle

This off the ARISS webpage:
< http://www.rac.ca/ariss/oindex.htm#New%20ARISS%20Operations >:
The ARISS program is pleased to announce that the amateur radio equipment aboard the International Space Station is now operating in cross-band repeat mode. We realize that many of you will miss the packet-operating mode. However, cross-band repeat allows further experimentation of the ISS amateur radio system

The downlink for this operating mode remains the same, so listen for the station on 145.80 MHz. The new uplink frequency is 437.80 MHz. All frequencies are subject to Doppler shifting. For further information on working satellites and adjusting for Doppler shift, please review Emily Clark's (W0EEC) excellent presentation on AMSAT's website:
http://www.amsat.org/amsat-new/information/faqs/Intro_sats.pdf

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[09182005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-268.S2
WSR 268 Part 2 09/25/2005

AMSAT NEWS SERVICE BULLETIN 268.S2 FROM AMSAT HQ
SILVER SPRING, MD, SEPTEMBER 25, 2005
TO ALL RADIO AMATEURS
BID: $ANS-268.S2

PCSAT2 ?0-??
Catalog Number:
Launch Date: August 1, 2005

Status: Operational

PCSAT2 was installed on the exterior of the International Space Station and was activated on August 3, 2005.

PCSAT2 CAPABILITIES: PCSAT2 is attached to the ISS and so its operations must be in cooperation with the ARISS communications suite to minimize any mutual interference and to coordinate activities. Here are the capabilities of the PCSAT2 and ARISS payloads:

PCSAT SYSTEM A:

435.275 PCSAT2 DOWNLINK 1200 baud packet with uplink on 145.825
435.275 PCSAT2 DOWNLINK Occasional user PSK-31 continuous downlink
145.825 PCSAT2 DOWNLINK 1200 baud packet
PCSAT SYSTEM B:

437.975 PCSAT2 DOWNLINK periodic Solar Cell data and PCSAT2 telemetry at
9600 baud
437.975 PCSAT2 DOWNLINK TNC-B command downlink at 1200 baud
437.975 PCSAT2 DOWNLINK User Voice Repeater with VHF uplink
437.975 PCSAT2 DOWNLINK Packet digipeater with VHF uplink

It looks like PCSAT2 can best contribute at this time by operating in
PSK-31 mode for the near future. This is a very exciting new transponder
mode which solves the congestion problem on FM repeaters by letting
multiple stations all communicate at the same time.

PSK-31 users are welcome to try out the new PCSAT2 PSK-31 transponder
on ISS with an uplink on 29.402 +/- 1 KHz and downlink on 435.275 +/-
Doppler using FM.

The FM downlink lets everyone operate full duplex and everyone to see
the same view of the passband as everyone else. THus you can see exactly
what your signal looks like to everyone else.

Help Wanted:

Here is your chance to become a viable part of the Amateur
Satellite Community.

We are looking for a volunteer satellite packet
station in Hawaii that is interested in helping with
telemetry and sat-gating of PCSAT2 and
ARISS packets. Requirements are:

1) General familiarity with packet
2) TNC connected to a cross band radio that
     can RX on UHF and TX on VHF.
3) modest UHF beam and rotator system.

Contact WB4APR for more information.

Packets seen from PCSAT2 can be reviewed at:
http://www.findu.com/cgi-bin/pcsat2.cgi

A screen shot of both the 9600 bps and 1200 bps decoded data
as seen by Simon, 9W2QC, can be seen at:
http://www.9w2qc.net/pcsat2/

More information on PCSAT2 can be found at:
http://web.usna.navy.mil/~bruninga/pcsat2.html

[ANS-WSR thanks Bob, WB4APR and the U.S. Naval Academy Satellite Lab for
the aboveinformation.]

[08282005}
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
      FM REPEATER - V/U HIGH POWER

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Analog voice downlink:  435.300 MHz FM
         435.150 MHz FM
Analog voice uplink: 145.880 MHz FM
         145.920 MHz FM 67Hz PL tone
                        1268.700 MHz FM 67Hz PL tone

Digital Downlinks:      435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
                        2401.200 MHz FM  38k4 bps, AX.25
Digital Uplink:         145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
   Protocol (PBP)

Broadcast: PECHO-11
BBS:  PECHO-12

Current scheduled operating modes:

26 Sept
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

AO-51 Special Event - JOTA Weekend 15-16 Oct

The annual Boy and Girl Scouts "Jamboree on the Air" Amateur Radio event is
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event, amateur radio stations around the world are invited to participate.
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Scouts, and Satellite operators communicating with the Scouts, for this
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possible via AO-51 during this short time period. Base stations, please rem-
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October
15 until 1200 UTC on October 17, 2005.

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This will provide two independent FM repeaters (separate uplink and downlink
frequencies) for use over the weekend. Both repeaters will be for use by the
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Downlink: 435.300 MHz
Uplink: 145.920 MHz with 67hz PL Tone

AO-51 FM repeater #2
Downlink: 435.150 MHz
Uplink: 145.880 MHz with NO PL Tone

Here are some web links for information on the JOTA weekend activity.
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http://www.arrl.org/FandES/ead/ideas.html
http://www.scouting.org/international/jota.html

If your local club has a JOTA activity planned for the weekend please
consider
volunteering your services to provide a satellite communication station for
the event.
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Thanks for your support and participation.

[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[09252005]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Non-Operational?????

Uplink/downlink: 145.827 MHz 1200 baud AX.25 AFSK via W3ADO-1
Aux/Uplink: 435.250 MHz 9600 baud via PCSAT-2 (off)
APRS Downlink: 144.390 MHz (Region 2)

PCSat is a 1200-baud APRS digipeater designed for use by stations using
hand-held or mobile transceivers. Downlinks feed a central web site at:
http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy
under the guidance of Bob Bruninga, WB4APR.
[07242005]
=====
CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
              437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Cliff, K7RR reports:
In the latest Weekly Satellite Report, CUTE 1, #27844 is listed as
OPERATIONAL?
Indeed it is very operational as a CUBESAT sending CW telemetry on
436.8345 MHz. At the July 7 2005, 23:45:20 pass over the Western USA:
CUTE 1 6B A4 xx 7F D7 66A8 4702 FF FF7C 65
CUTE 1 6C A6 59 80 D9 66A8 4702 FF FE7C B6

The June 30th KEPS were within ten seconds of AOS and LOS. It is an very
good object to practice tracking as the orbit and transmitter power are
similar to proposed CUBESATS awaiting launch this December. As a check for
Doppler correction, the lack of change in tone is an excellent indicator.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram
nanosatellite that was launched by a Rokot rocket from Plesetsk at
14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz.
Initial orbital parameters were period 101.4 min, apogee 831 km, perigee
819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

[ANS WSR wishes to thank Cliff, K7RR, for this week's information]
[07242005]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)

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                   (435.325 n/a - temperature problems)
Uplinks:            145.850, 145.890, 145.930 FM
                   1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink:             145.850 or 145.925 MHz 9600-baud FSK
Downlink:           437.325 MHz
Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[05152005]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink:             145.90 145.92 145.94 145.96 MHz FM
                     (using 1200-baud Manchester FSK)
Downlink:           437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon:      2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

A WOD collection of current graphics along with general information
and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
                    approx. 10 days ON, 10 days OFF
Mode-S Beacon:      2401.500 MHz. ... OFF
UHFBeacon:          435.025 MHz. ...  OFF

OSCAR-11 is back! I received the good news, on Saturday morning, while
at the AMSAT-UK Colloquium.  This was entirely unexpected!  On Sunday
morning Bob G4VRC played me a recording of an early morning pass
received that day.
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During the period 21 July to 14 August 2005 consistent signals have been heard from 30 July to 08 August. Signals seem to be weaker than usual, confirmed by the many reports received. However,since I last heard the satellite on 30 April, I've reinstalled my antennas , which makes comparisons difficult.

Many thanks for all the recent reports of OSCAR-11 including those from KU7Z (who heard it first), KB2M, VK6XH, HK7MKE, KA2UPW, JE9PEL, G1OCN, HB9SKA and G8OQW.

All the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working. One bit in channel 62, DSR mode, has changed from WRITE to READ. DSR is the Digital Store & Readout experiment. This could be significant if the experiment is still drawing current, but the other status bit indicates that it is switched OFF.

The on-board clock is now showing a very large error. It has lost approximately 19 days since 30 April. During the recent data collection period, the clock error has been changing at a decreasing rate. The size of the clock error and the rate at which it is changing is similar to the duration of the solar eclipse periods. This suggests that the clock might have been switching OFF during eclipses.

The eclipses have now ended, and the satellite should be in continuous sunlight for the remainder of this year, and well into next year. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures.

If the watchdog timer is still operating on a 20 day cycle, ie. approximately ten days ON followed by 10 days OFF, then the VHF beacon should resume transmissions around 18 August.

The Beacon frequencies are -

VHF 145.826 MHz. AFSK FM ASCII Telemetry

UHF 435.025 MHz. OFF

S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is www.users.zetnet.co.uk/clivew/

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT112.CWV, to prevent duplication.

[ANS-WSR thanks Clive, G3CWV, for the above information]

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/

MPEG3 files can be found here at Mineo, JE9PEL website:
http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm

[08212005]
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/EX

SB SAT @ AMSAT <W8ISS $ANS-268.S3

WSR 268 Part 3 09/25/2005

AMSAT NEWS SERVICE BULLETIN 268.S3 FROM AMSAT HQ
SILVER SPRING, MD, SEPTEMBER 25, 2005
TO ALL RADIO AMATEURS
BID: $ANS-268.S3

THE FOLLOWING ARE IN ORBIT BUT ARE
NON-OPERATIONAL AT THIS TIME:

POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 435.250 MHz
          435.275 MHz

Uplink: 145.925 MHz
          145.975 MHz

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

PO-28 (POSAT-1), Portugal's first satellite, launched 12 years ago, will be turned over to Amateur Radio use in the very near future. That was the word July 30 from AMSAT-UK Secretary Jim Heck, G3WGM, during the AMSAT-UK International Space Colloquium in Guildford, England.

Launched September 25, 1993, the satellite operated as a packet store-and-forward BBS (9600 baud FM FSK) on Amateur Radio frequencies for several weeks in early 1994. Over the years, PO-28's primary usage has been commercial, although plans have called for eventually shifting its operation to ham radio use. G3WGM reports that following lengthy negotiations it has been agreed that the satellite can be switched permanently to amateur frequencies. The changeover is expected to take a couple of weeks.

The Portuguese satellite was built at the University of Surrey as part of a collaborative satellite technology program that involved industry and academe. Uplink frequencies will be 145.925 and 145.975 MHz. Downlink frequencies will be 435.250 and 435.275 MHz. More information on PO-28 is on the AMSAT Web site http://www.amsat.org/amsat/sats/n7hpr/po28.html.

Uplink Frequencies: 145.925 and 145.975 MHz
Downlink Frequencies: 435.250 and 435.275 MHz

Orbit: 822 x 800 km, 98.6 deg inclined, sun-synchronous.

Transponder capabilities include FM repeater and 38k4 data. If you want to hear how loud this satellite is, listen on 429.950 until the change back to amateur radio service.

Keplerian elements for PO-28 are not currently contained in the AMSAT keps bulletins, but can be found at Celestrak in amateur.txt using the name "POSAT". Users of Space Track should query the NORAD Satellite ID number 22829. The name listed by Space Track is "EYESAT A".

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[ANS-WSR wishes to thanks Trevor, M5AKA and Jim, G3WGM, for this week's information.]
[08072005]

=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels
of telemetry. Temperatures and voltage are nominal, but there seems to
be a problem with the onboard receiver, refusing to accept commands.
The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

```
Uplink:      21.260 to  21.300 MHz CW/USB
Downlink:   145.860 to 145.900 MHz CW/USB
Beacon:     145.860 MHz
Robot:      145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:             145.900 FM 9600-baud FSK
Downlink:           435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS:                UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink:      145.858 to 145.898 MHz CW/USB
Downlink:     29.354 to  29.394 MHz CW/USB
Beacon:       29.352 MHz (intermittent)
SSB meeting frequency:  29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to ANS:
RS-15 beacon seemed to be back in the mode where it's a tone about 5 seconds
off and then 5 seconds on this morning.

ANS is looking for more confirmations of RS-15 coming back.

[ANS thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink:             145.84 145.86 145.88 145.90 MHz FM
                    (using 1200-baud Manchester FSK)
CW downlink:        437.125 MHz
Digital downlink:   437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS:                LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
```

[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HLO1-11
BBS: HLO1-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of
launch, PanSat spread-spectrum digital transponders were to
be available to Amateur Radio operators along with software to utilize
this technology.

The satellite is still operating, however, the spread spectrum packet
radio portion never took place. The spacecraft is now beyond it's
initial 2-year mission life, but telemetry records are still being
downloaded.

For more information, visit the official PanSat web site at:

http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band 145.840 - 145.990 MHz CW/LSB
U-band 435.550 - 435.800 MHz CW/LSB
L1-band 1269.250 - 1269.500 MHz CW/LSB
L2-band 1268.325 - 1268.575 MHz CW/LSB
S1-band 2400.350 - 2400.600 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB

```
          K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:    2401.323, 24,048.035
[05232004]
-----
SO-42  SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
 Downlink:           437.075 MHz
Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41  SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:             145.850 MHz
Downlink:           436.775 MHz
Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is  welcome to use the digipeating/APRS features of Sapphire,
callsign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small German
scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS
e.V." (German
```

acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der Schule", which means: 'working group for amateur radio anand telecommunications in schools'). AO-49 is designed as a "store and broadcast" system for APRS based messages, dedicated for the use of schools in combination with the existing WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears AO-49 is not properly aligned to illuminate the solar panels. This should end soon. Due to its orbit, AO-49 will be in a phase without eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to allow decoding of the received DATA0 frames. It is available at: http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[05092004]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-268.S4
WSR 268 Part 4 09/25/2005

AMSAT NEWS SERVICE BULLETIN 268.S4 FROM AMSAT HQ
SILVER SPRING, MD, SEPTEMBER 25,2005
TO ALL RADIO AMATEURS
BID: $ANS-268.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress

This from Matt Bennett, KF6RTB, UCISAT Communications Team Member:

Our website is www.ucisat.net .This is a new website, however, and doesn't have the "Status" section active yet. Because of the growing interest in our project, I'll push our webmaster to create updates (hopefully) on a week-to-week basis. For now, the current status of the mission is as follows:

-Expected Launch Date: October 31st, 2005
-Frequency Allocation: Submission in Progress
-Construction Status: Sub-Assembly
[WSR to thank Matt Bennett, KF6RTB, for this week's report.]
[01302005]
=====
SSETI ?O-??
Catalog Number:
Proposed Launch Date: LATE 2005

Status: AWAITING LAUNCH

Graham, G3VZV reports:
Dear all,

Unfortunately we have just learnt that we have an INDEFINITE launch delay.

This is due to one of the spacecraft on the launch, "SINAH", having suffered a significant failure and not being ready to fly.

Early indications suggest that we have a delay of at least one month, but this is not confirmed.

The launch campaign team will make the spacecraft and the ground support equipment safe and then come home.

This is, of course, very unfortunate, but it is not critical! The spacecraft can easily wait for the new launch date without any significant problems, and we will fly it as soon as we can.

In the meantime please cancel all arrangements for your national launch events.

We'll get there eventually.

Watch this space...

Neil

SpaceDaily has a report about SSETI at:
http://www.spacedaily.com/news/internet-04zzzu.html

You can find more info about SSETI at:
http://sseti.gte.tuwien.ac.at/WSW4/

Latest news about SSETI can be found at:
http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php

Look at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm

[ANS thanks Graham, G3VZV for the above information]
[09252005]
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

William Leijenaar, PE1RAH reports on July 16th, 2005:

Hi AMSATs,

I always like to inform the AMSATs public about my P3e work, but unfortunatly due to
some reasons there was not much time and nothing much to say...

However, now I am happy to announce that the my MODE-UV transponder design for P3e is ready at the P3e integration place in Marburg (Germany). About 4 weeks ago I was in Marburg before, where the transponder has been checked. Unfortunatly some unsure things were found in the design. The unsure things were about long term stability after many years in space.

At home in The Netherlands, I changed the design with some minor changes to have a secure long term stability. Finally I tested the transponder again

and it performed well within the specifications. Again something learned for
future transponder designs :o)

Last Wednesday I drove to AMSAT-DL P3e integrations place in Marburg again,
and have my transponder again checked. In the beginning it seemed that the
70cm receiver lost 10dB in sensetivity. After some more measurements we find
out that it was due to a bad attenuator we used for protection at the input.

Together with Karl Meinzer we looked for any problems, but so far we could
see (without HELAPS) all was okay. In the afternoon I went back home again,
this time without the MODE-UV.

Now the MODE-UV will get a new home, the home of P3e... :o)
I hope the transponder will work like its elder sister in AO-10, and you all
will enjoy it for many years...

It was lots of work to get it this far, but I know it is for a good
purpose...

For the latest project status update please visit the AMSAT-DL
P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[07172005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425

[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
       2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
        437.345
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
=====
SUITSAT ?O-??
Catalog Number:
Proposed Release Date: December 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: TBA

To be released from an airlock of the International Space Station some time
in
December of 2005.
[09182005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
        888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satelite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the
memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen,
G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX